

Rethink Robotics® meets German Engineering



Durable. Quiet. High-quality.

The new **Sawyer BLACK Edition**

Durable. Quiet. High-quality.

One year after the acquisition by the Rethink Robotics GmbH, the hardware of cobot Sawyer has reached a new level of quality thanks to German engineering. This makes the Sawyer BLACK Edition a high-performing cobot to support your production.

Advantages of the Sawyer BLACK Edition

- Durable hardware
- Quiet operation
- High-quality components



Sawyer

The high performer for versatile tasks

Sawyer continues to serve in the BLACK edition as the easy to use, flexible and highly accepted collaborative robot.

With Sawyer BLACK Edition, processes that could not simply be automated with industrial robots in the past can be automated quickly and easily - like for example machine loading, circuit board tests, and other dangerous, dirty, and dull tasks.

Sawyer comes as a complete solution, including the Intera software and two integrated embedded vision systems.

Rethink Robotics with its cobot Sawyer stands for:

Easy application

Flexibility

High acceptance



Train by Demonstration: Easy application

The Intera software gives Sawyer its unique user interface: The robot can be trained for new tasks by guiding its arm freely and demonstrating the movements of the procedure. The arm is operated with the use of integrated buttons. This allows the direct input of settings and functions. The robot is up and running to perform a task within a matter of minutes. No other cobot becomes productive in such a short period of time, which leads to a rapid ROI.

Embedded Vision: Flexibility

Sawyer's embedded vision system – along with the Intera software – allows the robot's positioning system to provide for a dynamic and flexible reorientation and adjustment to the environment. In combination with the easy-to-set landmarks, Sawyer can quickly be deployed in various positions, adapt after being relocated, and promote a rapid and flexible operational readiness. This enables a wide variety of applications without requiring additional hardware, software, or integration.

Force Sensing: High acceptance

Sawyer permanently controls its joint torque and position simultaneously. By monitoring both variables, Sawyer controls and feels the amount of force it applies in different directions, the same way people do when performing tasks, without the need to add sensors or additional hardware. The animated eyes, combined with more silent operation, make Sawyer BLACK Edition even more popular among employees.





Click Smart

The clever gripping system

Cobot Sawyer can be deployed with various gripping systems in numerous application areas. Click Smart makes replacing the gripper kits easier and more comfortable. With a bayonet fastening, the grippers can be replaced within seconds without using any tools. Information on products and programs are stored. Sawyer thus recognizes the gripper kits immediately and loads the according programs and processes. This returns Sawyer ready for operation instantly after changing the gripping system.



Intera

Software that connects, controls and coordinates

Intera is a high performing software control platform. The software is the basis for an immediate operational readiness of collaborative robots within simple and complex tasks along the production and supply chain.

The intuitive software provides a clever and flexible interface to Sawyer, can be controlled through the screen and can be operated by employees without any programming experience. Therefore, reducing integration time and the cost of deployment.

Intera also serves as a central controller for other devices interacting with the robot, allowing you to train the entire work cell from a single location. When the entire work cell is controlled through Intera, data collection, aggregation, and analysis will lead to better decision making – paving the way for fully integrated IIoT.

With the ability to connect and coordinate a work cell, Rethink Robotics' Sawyer and Intera are bringing a new level of collaborative technology to the factory floor. The vision for a fully IIoT enabled smart factory is based on a series of steps toward automating and digitalizing

specific work cells. Thus begins the journey towards smart factory with the Intera software of Rethink Robotics.



Advantages of Intera

- High sensitivity force behaviors and adaptive decisions
- Quick training and easy integration
- Dynamic registration through embedded cameras

Technical details

Target applications in areas such as:

- CNC machining
- PCB handling and ICT
- Metal fabrication
- Molding operations
- Packaging
- Line Loading and unloading
- Test and inspection

The complete robot solution:

- Sawyer BLACK Edition for higher durability, and even more silent operation.
- Intera software - best-in-class Robot Operating Platform
- Embedded Cognex cameras
- Robot Positioning System – dynamic reorientation using embedded cameras
- ClickSmart gripper kits
- Global support with service hubs in Asia, Europe and USA

| Basic Specifications | |
|-------------------------|--|
| Max Reach | 1260 mm |
| Typical Tool Speed | 1.5 m/s |
| Degrees of Freedom | 7 |
| Operating Temperature | 5° C - 40° C, 80 % relative humidity |
| Joint Ranges | J0 - J3 = 350° J4 - J5 = 340° J6 = 540° |
| Payload | 4 kg |
| Power Requirements | 100-240 V AC, 47-63 Hz, 4A Max |
| I/O Ports (Controller) | 8 digital in / 8 digital out |
| Communication | Modbus TCP, TCP/IP, ProfiNet, EtherNet/IP |
| IP Class | 54 |
| Collaborative Standards | ISO 10218-1:2011 |
| I/O End of Arm | 4 digital in / 2 digital out / 2 analog in / 24 V DC 2A, ClickSmart plate required |

HAHNGROUP

advanced automation

Rethink Robotics is a manufacturer of collaborative robots and robotic systems. In October 2018, the assets of the pioneer of collaborative robotics were taken over by the HAHN Group as part of the Robotics Division and further developed with German engineering. Rethink Robotics can thus rely on the know-how and years of experience of one of the leading companies in the field of industrial automation and robotics. With the cobot Sawyer and the Intera software, Rethink Robotics stands for easy operability, flexible applicability and high acceptance among employees. For more information visit www.rethinkrobotics.com

The HAHN Group consists of a network of specialized companies for industrial automation and robot solutions. With its own production sites, the group currently employs around 1,500 people worldwide. Well-known customers from the automotive, consumer goods, electronics, and healthcare industries benefit from the HAHN Group's 30 years of expertise and automation know-how. For more information visit www.hahn.group/en



Rethink Robotics GmbH
Industriestr. 38c
44894 Bochum, Germany

Tel. +49 234 622030
info@rethinkrobotics.com
www.rethinkrobotics.com

part of the **HAHNGROUP**